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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,366	05/18/2005	Takashi Abe	09792909-6253	7105

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EXAMINER	
HSU, AMY R	

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
03/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/535,366	ABE ET AL.	
	Examiner	Art Unit	
	Amy Hsu	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5 and 6* is/are pending in the application.

4a) Of the above claim(s) 4, 7-20 is/are withdrawn from consideration. *AY 2/28/08*

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5 and 6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 May 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/18/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al. (US 6674470).

Regarding Claim 1, Tanaka teaches a solid-state imaging device comprising an imaging area having a plurality of unit cells in a two-dimensional array (*Fig. 3)*, each unit cell including a group of a predetermined number of pixels (*Fig. 7)*; and signal lines used for selecting the pixels (*Fig. 7 reference numbers 38-1 and 40-1, "photodiode selection lines")*, wherein the unit cell includes a plurality of photoelectric converters corresponding to the pixels (*Fig. 7 reference numbers 92a, 92b)*; amplifying means

(*reference number 84, "amplifying transistor"*), shared by the pixels (*as seen in Fig. 7 there is one amplifying transistor for the two pixels*), for amplifying a signal read out from each photoelectric converter and outputting the amplified signal (*the signal is output to reference number 42-1*); and transfer means for selectively reading out the signal from the photoelectric converter and supplying the readout signal to the amplifying means (*reference number 93a, 93b "read-out transistors"*), and wherein the signal line used for driving the amplifying means is a full-face signal line shared by all the pixels and driving the full-face signal line allows the signal to be read out from each pixel (*reference number 36-1 and Col 7 lines 54-55*).

Regarding Claim 2, Tanaka teaches the solid-state imaging device according to claim 1, further comprising reset means (*reference number 96*) for resetting an input section of the amplifying means (*Col 7 Lines 54-55*).

Regarding Claim 3, Tanaka teaches the solid-state imaging device according to claim 2, wherein the signal line used for driving the reset means is the full-face signal line (*reference number 36-1, "reset line"*), and driving the full-face signal line resets the input section of the amplifying means (*driving the reset line causes the amplifying transistor to be reset by the reset transistor*)..

Regarding Claim 5, Tanaka teaches the solid-state imaging device according to claim 2, wherein a full-face selection signal passing through the full-face signal line

used for driving the reset means and the amplifying means (*signal line 36-1 drives the reset means which, as it is directly connected to reference number 96, the reset transistor, which in turn resets the amplifying transistor, reference number 94)* is changed from an active state to a non-active state at a time outside a readout operation period of the pixel (*Fig. 8 shows the state of the full face signal line, 36-1 is changed from active to non-active state outside the readout period).*

Regarding Claim 6, Tanaka teaches the solid-state imaging device according to claim 2, wherein the reset means is a transistor (*Fig. 7 reference number 96)*, and wherein a full-face selection signal passing through the full-face signal line is changed to an active state during a readout period of the pixel, a reset signal supplied to the gate of the reset means is changed to a non-active state, and a driving signal supplied to the transfer means is changed to the active state to read out a charge signal stored in the photoelectric converter (*this well known process or reset and readout, transfer and output are illustrated in the timing diagram of Fig. 8).*

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsunaga et al. (US 2001/0052941) teaches an image system for amplification type MOS sensor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Hsu whose telephone number is 571-270-3012. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amy Hsu
Examiner
Art Unit 2622

ARH 2/20/08

LIN YE
SUPERVISORY PATENT EXAMINER